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A NEW SPECIES OF *TYDESSA* PEACOCK (COLEOPTERA: PYTHIDAE: PILIPALPINAE) FROM WESTERN NORTH AMERICA

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Abstract.—*Tydessa blaisdelli* Pollock, NEW SPECIES, is described on the basis of four specimens from California and Nevada. This species is compared to the other described species, *T. lewisi* (Pic), from Japan. The genus *Tydessa* is the only Holarctic representative of Pilipalpinae, and *T. blaisdelli* is the only known species of the subfamily in North America. A brief taxonomic history of the genus, and a key to adults are provided.

Key Words.—Insecta, Pythidae, Pilipalpinae, Holarctic, new species

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The first described species now included in *Tydessa* Peacock was *Dasytes constrictus* Lewis (1895), a junior primary homonym of *Dasytes constrictus* Broun (1883). Pic (1937) provided the replacement name *Dasytes lewisi.* However, Peacock (1982) discovered that this species did not belong in *Dasytes,* and indeed, was actually a member of Tenebrionoidea rather than the Cleroidea. *Tydessa* was proposed by Peacock (1982) for the species *Dasytes lewisi* Pic, the genus being placed in Pyrochroidae, near *Incollogenius* Pic. The larva of *T. lewisi* was described by Nikitskiy (1986), who elevated Pilipalpinae to family rank, and proposed a new tribe, Tydessini, for reception of the single species *T. lewisi.*

Recently, I examined several specimens from California and Nevada also belonging to the genus *Tydessa*; these are members of an undescribed species. This new species is described below. Also, Sasaji (1986) and Watt (1987) mentioned an undescribed species of *Tydessa* from Taiwan; I have not yet been able to examine specimens of the Taiwanese species. This new U.S. species represents the first Nearctic record for Pilipalpinae; it is hoped that its description may lead to discovery of additional material and perhaps the larval stage, of this apparently rare beetle.

Adult specimens of *Tydessa* were borrowed from collections indicated by the following acronyms: ANP, Department of Entomology, The Academy of Natural Sciences of Philadelphia, Philadelphia; BMNH, Department of Entomology, British Museum (Natural History), London; CAS, Department of Entomology, California Academy of Sciences, San Francisco; MCZ, Museum of Comparative Zoology, Harvard University, Cambridge.

TYDESSA PEACOCK 1982

Tydessa Peacock 1982: 362. Type species (by monotypy): *Dasytes constrictus* Lewis 1895 (= *D. lewisi* Pic); Nikitskiy 1986; Sasaji 1984, 1986; Watt 1987.

Key to adults of *Tydessa* Peacock

1. Antennomeres submoniliform (Fig. 3); hind angles of pronotum (Fig. 5) distinct, subrectangular; basolateral margins of pronotal disc subparallel

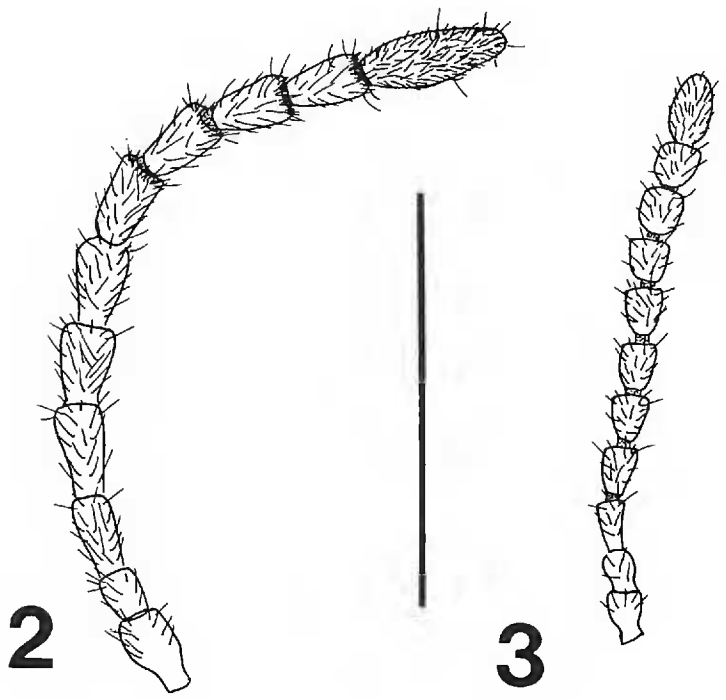
Figure 1. *Tydessa blaisdelli* Pollock, NEW SPECIES, female paratype [CAS]. Habitus, dorsal view. Length of specimen = 7.9 mm.

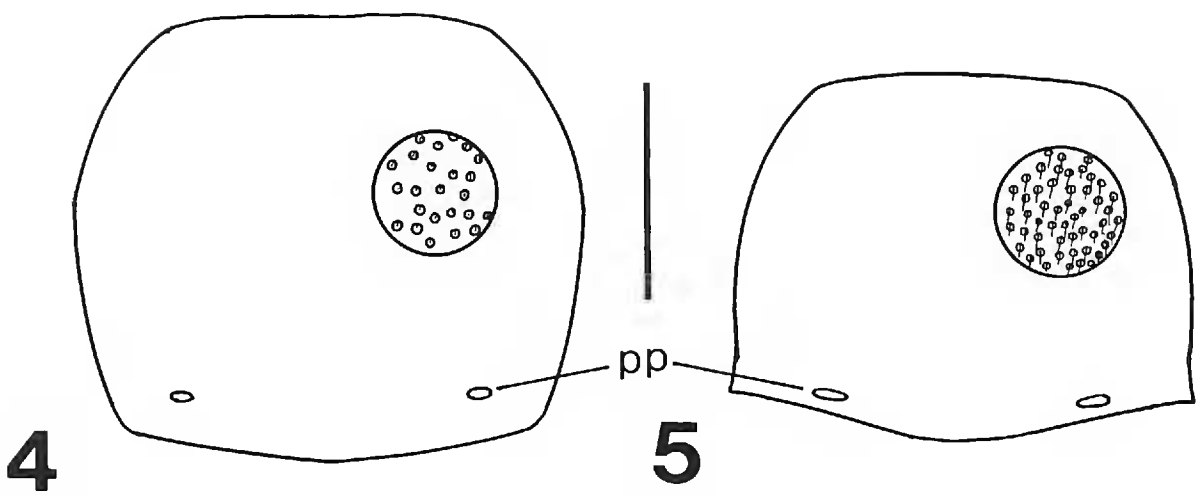
to slightly sinuate anterad hind angles; pubescence on pronotum and elytra distinct; color of head and pronotum dark piceous with blue metallic luster; distribution—Japan ..... *T. lewisi* (Pic)

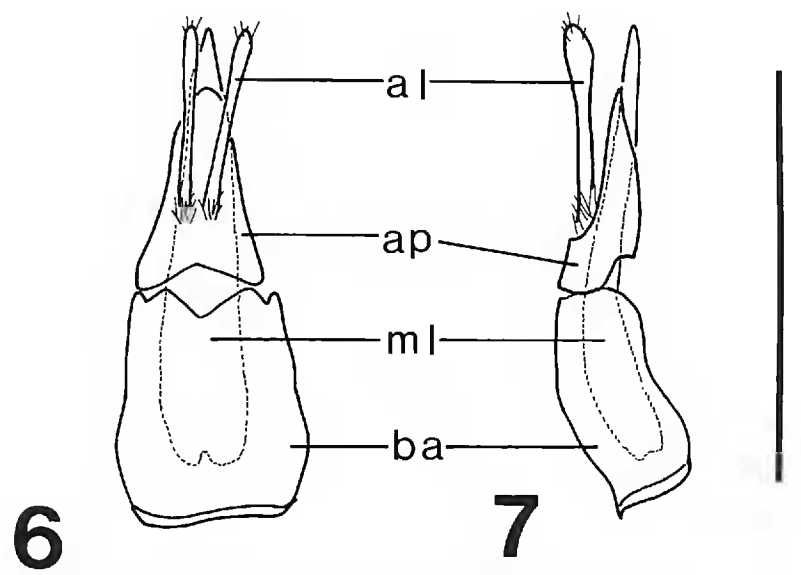
– Antennomeres filiform (Fig. 2); hind angles of pronotum (Fig. 4) indistinct, rounded; basolateral margins of pronotal disc constricted anterad hind angles; pubescence on pronotum and elytra inconspicuous; color of head and pronotum piceous, non-metallic; distribution—western North America ..... *T. blaisdelli* Pollock, NEW SPECIES

Tydessa blaisdelli Pollock, NEW SPECIES

Types.—Holotype: male, labelled: "Adams Spgs, Lake Co. CAL. VI-18-11/F.E.







Figures 2–7. Figure 2. *Tydessa blaisdelli* Pollock, NEW SPECIES, male holotype [CAS]. Right antenna, dorsal view. Figure 3. *Tydessa lewisi* (Pic), female paralectotype [BMNH]. Right antenna. Scale bar for 2 and 3 = 1 mm. Figure 4. *Tydessa blaisdelli* Pollock, NEW SPECIES, male holotype [CAS]. Outline of pronotum showing sample of punctation and position of posterior pronotal pits. Figure 5. *Tydessa lewisi* (Pic), female paralectotype [BMNH]. Outline of pronotum showing sample of punctation and position of posterior pronotal pits. Scale bar 4 and 5 = 0.5 mm. Figure 6. *Tydessa blaisdelli* Pollock, NEW SPECIES, male holotype [CAS]. Aedeagus, ventral view. al = accessory lobe; ap = apicale; ba = basale; ml = median lobe. Figure 7. *Tydessa blaisdelli* Pollock, NEW SPECIES, male holotype [CAS]. Aedeagus, lateral view. Scale bar for 6 and 7 = 1 mm. al = accessory lobe; ap = apicale; ba = basale; ml = median lobe.

Blaisdell Collector/Blaisdell Collection/[pink disc]/HOLOTYPE ♂ Tydessa blaisdelli Pollock." Holotype deposited in the California Academy of Sciences. Paratypes: CALIFORNIA. *LASSEN CO.:* Lassen Peak, 30 Jun 1950 (P. S. Bartholomew Collection), P. S. Bartholomew, Calif. Acad. Sci. Accession 1967, 1 female [CAS]. NEVADA. *WASHOE CO:* Reno (Liebeck Collection), 1 female (disarticulated in alcohol) [MCZ]; no collection data (Horn Collection), 1 female [ANP].

Description [format follows Peacock (1982) for ease of comparison with *T. lewisi*].—*Color:* unmetallic brown to piceous; elytra slightly lighter in color than head and pronotum; basal three or four antennomeres and tarsi light brown. *Vestiture:* setae on inner margins of eyes conspicuous, slightly longer than diameters of punctures; setae on pronotum (Fig. 4) and elytra very short, barely visible, setae shorter than diameter of punctures; lateral margins of pronotal disc with scattered, short, erect setae; setae conspicuous on ventral surface, sparse on middle of metasternum; tibiae and tarsi with dense, long setae. *Punctation:* head with coarse, deep punctures, sparse on center of frons; punctures separated by approximately their own diameters; pronotal and elytral punctures shallow, small, separated by about 3.0× their own diameters; microsculpture absent among pronotal and elytral punctures, slightly granulate around inner margins of eyes; ventral surface variously punctate, more uniform on thorax, lighter on abdomen; mesepisternum impunctate along inner margin. *Form* (Fig. 1): head and pronotum subequal in width; elytra about 1.5× wider, approximately four × length of pronotum; lateral elytral margins subparallel, widened slightly about their midlengths. *Antennae* (Fig. 2): elongate, all antennomeres filiform; lengths of antennomeres 3–7 2.0 × widths; 8–11 slightly less elongated; antennomeres distinctly wider in females than in males. *Thorax:* pronotum (Fig. 4) subcircular, lateral margins of disc evenly arcuate from anterior to posterior margins; two small, deep pits near hind angles; hind angles poorly defined, rounded; lateral margins smooth, except for slightly raised carina extended anteriorly half the length of pronotum. *Male Genitalia* (Figs. 6 and 7): apicale slightly shorter than basale; apicale entire distally, not cleft between accessory lobes; accessory lobes elongate, slender, widened slightly distally. *Size:* length from 5.9–7.1 mm; maximum width (across elytra) from 1.7–2.4 mm.

Diagnosis.—Specimens of *T. blaisdelli* may be distinguished from those of *T. lewisi* on the basis of characters given in the key, above.

Etymology.—This species is named in honor of F. E. Blaisdell, Sr., who worked on Tenebrionoidea of western North America, and also who collected the holotype of the species.

Material Examined.—See types.

Comments

The genus *Tydessa* is the only Holarctic representative of Pilipalpinae, a subfamily otherwise represented only in Australia, Chile, New Zealand, and Madagascar. A phylogenetic and biogeographical analysis of the entire group is underway (unpublished data), using characters of both larval and adult stages.

The distribution pattern exhibited by members of *Tydessa* seems a possible candidate for an Asiamerican origin, as explained by Noonan (1986). Because nothing is known about the habitat requirements of the genus, it is difficult to speculate whether or not the disappearance of a transberingian dispersal corridor may have caused the vicariant event separating the Asian and North American stocks.

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